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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,273	09/18/2001	Franco Castellini	BUG 2 0145	8708
7590 03/28/2006			EXAMINER	
Richard J. Minnich, Esq. Fay, Sharpe, Fagan, Minnich & McKee, LLP Seventh Floor 1100 Superior Avenue Cleveland, OH 44114-2518			JASTRZAB, KRISANNE MARIE	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/955,273	<b>Applicant(s)</b> CASTELLINI, FRANCO	
	<b>Examiner</b> Krisanne Jastrzab	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-22, 24-26 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-5, 7-22, 24-26 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/15/2005 has been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-3, 20-21 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 2 and 3, these claims are found to be vague and indefinite because they fail to properly further limit the claim from which they depend because they merely recite method limitations, but depend from an apparatus claim. The "switching means" has already been recited along with the function and further limiting that function fails to properly further limit the structure.

Further with respect to claim 3, the recitation of "when a preset quantity of fluid is finished" is found to be vague and indefinite because it is unclear as to what is meant by "finished". Clarification is required.

With respect to claims 20-21, these claims are found to be vague and indefinite because of the recitations of "type", because it is unclear as to what would constitute an element equating to a "type".

With respect to claim 28, this claim is found to be vague and indefinite because it appears to be set up in a Jepsom format, but fails to employ the proper language for such. Thus it is unclear as to whether the dental unit is being positively claimed or only that following "the apparatus comprising". Clarification is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4-5, 7-21, 25-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by either Detsch et al., U.S. patent No. 5,526,841 or 6,019,117.

Both Detsch et al., references teach a water line decontamination system for use in dental water lines. A container is provided for the handpieces or tools of the dental unit connected to a main water line. A secondary line is brought into controlled fluid communication with the lines and the handpieces in such a manner as to prevent

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backflow into the main water supply. A third line can also be provided to effect a purging of the lines with air or sterile water. The unit is valved and fully controlled in either an automated fashion or by manual activation by a user. The fluids supplied can include water, saline, disinfectant and medicated solution. See column 2, lines 25- 35, column 4, line 25 through column 5, line 5 and column 6, line 65 through column 7, line 15 of '841 as exemplary. See particularly column 5 of the references.

Claims 4-5, 7-22, 24-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Castellini EP 734,692 A2.

Castellini teaches substantially the invention as claimed. A dental water decontamination system is taught employing a secondary line supplying disinfectant to the lines and the handpieces, with a third line for flushing the system with sterile water and the control means for all lines, including activation buttons for some selections by the dentist, as well as a microprocessor unit allowing for programmed, sequential control of all the activities of the lines. See the entire document and particularly column 6, line 52 through column 7, line 20.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Detsch et al., '117 or '841 or Castellini as applied to claim 28 above, and further in view of Rainey U.S. patent No. 6,253,964 B1.

Rainey teaches a self cleaning fluid distribution system for a dental unit substantially as that claimed and clearly teaches fully filling the main circulation line with cleaning or disinfecting agent and retaining the agent in the line for a period of time prior to flushing. See column 5, lines 34-60.

It would have been obvious to one of ordinary skill in the art to configure the control means of any of Detsch or Castellini recited above, such that the lines are fully filled with the treating agent and it is held therein for a preset period of time, because as is taught in Rainey, the complete filling and the predetermined contact time are required in order to ensure thorough treatment of the system.

### ***Response to Arguments***

Applicant's arguments filed 2/2/2006 have been fully considered but they are not persuasive.

Applicant argues that neither of the Detsch patents nor the Castellini teach or suggest an apparatus having two supply lines, three different fluids and only one interchangeable tank, however, the Examiner would disagree and note that all three have at least one interchangeable supply tank and a source of air to thereby supply three different fluids. The Examiner would further point out that having interchangeable tanks offer the provision of a multitude of "different fluids".

Applicant further argues that the Detsch references do not supply different fluid to the same supply line but have dedicated lines, however, the Examiner would disagree and point out that all of the fluids are switchably directed to the main circulation line for the dental unit through structure clearly and directly corresponding to Applicant's claimed "branches". See for example, column 4, line 65 through column 5, line 15 of '841.

Finally, Applicant argues that the applied references do not meet the claimed invention because they teach the use of "fixed" tanks, however, the Examiner would disagree and point Applicant to column 4, lines 20-35 and column 6, line 64 through column 7, line 10 of '841 as exemplary of the interchange and refill or replacement of the fluid supply tanks.

### ***Conclusion***

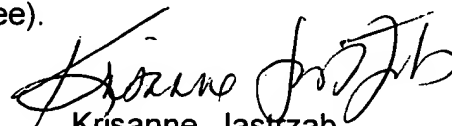
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krisanne Jastrzab whose telephone number is 571-272-

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1279. The examiner can normally be reached on Mon.-Wed. 6:30am-4:00pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Krisanne Jastrzab  
Primary Examiner  
Art Unit 1744

March 20, 2006